



The AMIA 2005 Tutorial Program will provide a learning experience filled with rich content.

Twenty-nine tutorials are offered at AMIA 2005 taught by a faculty comprised of AMIA's widely recognized thought leaders in the field are designed to stimulate interest in the diverse body of knowledge represented by AMIA.

These tutorials are divided into four series - Primers, EHRs, Methods, and Selected Topics.

AMIA TUTORIALS - PRIMER SERIES

Tutorial 16: Unified Medical Language System UMLS® Overview

Saturday, October 22 - 1:00 p.m. - 4:00 p.m.

Presenter:

Jan Willis

UMLS Support, National Library of Medicine
Bethesda, MD

Tutorial Overview:

The purpose of NLM's Unified Medical Language System® (UMLS®) is to facilitate the development of computer systems that behave as if they "understand" the meaning of the language of biomedicine and health. Toward that end, NLM produces and distributes the UMLS Knowledge Sources (databases) and software tools (programs) for use by system developers. The UMLS Metathesaurus serves as an official distribution vehicle for HIPAA standard code sets and US government target clinical vocabulary standards.

This course provides an overview of UMLS Knowledge Sources and associated programs, including the Metathesaurus, a database of 1 million+ concepts from over 100 biomedical vocabularies, the Semantic Network, used to categorize all concepts in the Metathesaurus and help interpret meaning, and the SPECIALIST Lexicon and lexical tools, used to process text and language for clinical, research, and educational purposes.

Outline of Topics:

- UMLS introduction and overview
- Metathesaurus
- RxNorm
- SNOMED CT
- Semantic Network
- SPECIALIST Lexicon and Tools
- UMLS Knowledge Source Server
- MetamorphoSys
- RRF Browser

Intended Audience:

Biomedical informatics and other researchers; physicians, nurses, and other health care professionals; computer scientists, system developers, and programmers; and medical librarians and other information professionals

Content Level: 100% basic.

TUTORIAL PRESENTER INVITED RATE

You are receiving this as a special invitation from a tutorial instructor.

Receive \$20 off current rates on tutorial 16

Fax the attached registration form with special rates to AMIA at 301-657-1296 to receive this special offer.

AMIA 2005 Tutorial Primer Series:

This set of tutorials is designed to provide an introduction to key current and emerging areas in informatics and are considered essential to the core foundation of informatics theory, application, and practice.

- T1 - Introduction to Biomedical and Health Informatics
- T4 - A Primer on Health Level 7 - HL7
- T5 - Using the Resources of The National Center for Biotechnology Information (NCBI)
- T6 - Natural Language Processing (NLP) in Biomedicine
- T7 - PACS - Digital Medical Image Management
- T8 - Information Security in Health Care: Process and Technology
- T9- The eXtensible Markup Language (XML)
- T16- Unified Medical Language System UMLS Overview
- T23 - Discovering Knowledge: Data Mining
- T24 - Project Management: Implementing Systems on Time and with Budget
- T25 - Ontologies in Biomedicine
- T26 - Public Health for Informaticians



Personal Information

Last Name	First Name	MI
Suffix(es)		
Nickname for Badge		
Title / Position		
Institution / Organization		
Mailing Address <input type="checkbox"/> Home <input type="checkbox"/> Work		
City/State/Zip/Country		
Business Phone	Fax	
E-mail		

Professional Profile Please check all that apply:

- | | |
|--|--|
| <input type="checkbox"/> Business Administrator (BA) | <input type="checkbox"/> Pharmacist (RX) |
| <input type="checkbox"/> Computer Scientist (CS) | <input type="checkbox"/> Physical Therapist (PT) |
| <input type="checkbox"/> Dentist (DS) | <input type="checkbox"/> Physician (MD) |
| <input type="checkbox"/> Dietician (DT) | <input type="checkbox"/> Programmer (PR) |
| <input type="checkbox"/> Educator (ED) | <input type="checkbox"/> Scientist/Researcher (SR) |
| <input type="checkbox"/> Engineer (EN) | <input type="checkbox"/> Systems Analyst (AN) |
| <input type="checkbox"/> Fellow (FW) | <input type="checkbox"/> Technologist (TX) |
| <input type="checkbox"/> Graduate Student (S) | <input type="checkbox"/> Vendor/Consultant (VC) |
| <input type="checkbox"/> Health Information | <input type="checkbox"/> Veterinary Medicine (VT) |
| <input type="checkbox"/> Mgmt. Professional (HI) | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Hospital Administrator (AD) | |
| <input type="checkbox"/> Medical Librarian (ML) | |
| <input type="checkbox"/> Nurse (RN) | |

Demographic Questions

1. Did you attend Medinfo 2004? ☐ Yes ☐ No
2. How many previous AMIA Annual Symposia have you attended? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5+
3. Professional Setting (choose one):

<input type="checkbox"/> Academic Institution	<input type="checkbox"/> Clinical Group Practice	<input type="checkbox"/> Hospital	<input type="checkbox"/> None of those listed
<input type="checkbox"/> Ambulatory Care	<input type="checkbox"/> Government/Military	<input type="checkbox"/> Public Health	
<input type="checkbox"/> Consulting Firm	<input type="checkbox"/> Health Care System	<input type="checkbox"/> Vendor Organization	
4. Principal focus (check all that apply):

<input type="checkbox"/> Teaching/Faculty responsibilities	<input type="checkbox"/> Programming/Systems Work	<input type="checkbox"/> Marketing/Sales	<input type="checkbox"/> Other (please list)
<input type="checkbox"/> Student/Research fellow	<input type="checkbox"/> Research	<input type="checkbox"/> Consulting	
<input type="checkbox"/> Administration/Management	<input type="checkbox"/> Patient Care	<input type="checkbox"/> Public Health	
5. Length of time in the informatics field (years): ☐ <1 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ >15
6. Purchasing authority: ☐ Decision influencer ☐ Decision maker ☐ Not applicable

Symposium Registration

Full registration fees for members, non-members, and students cover all events except for tutorial, designated affiliate events, and selected social events. Registration includes CD-ROM proceedings, and registration bag with materials.

Author Rates for members and non-members are applicable to those who are the primary author of a paper, theater-style demonstration, poster, or a panel presenter. Author rates do not apply to tutorial presenters.

Student Rates for full-time students. They do not apply to part-time students. All students MUST present proof of student status including both a photocopy of a current, valid student ID plus a letter from the university/college registrar's office verifying current full-time enrollment in a degree or post-doctoral program at the time of the AMIA 2005 Annual Symposium.

Daily Registration covers all programs and events on the day registration is made. Registrants who wish to attend an event or program on another day must registration for additional day.

Registration includes CD-ROM proceedings, and registration bag with materials.

Expo-only Registration covers one-day attendance only at activities held in the Exhibit Hall, which includes exhibits and poster sessions. Expo-only registrants are not eligible to attend scientific program sessions, opening or closing session, or any other event held outside of the Exhibit Hall. No bag or CD-ROM included.

	ADVANCED If full payment received from 07/16/05 to 10/17/05	ONSITE Rates in effect after 10/17/05
AMIA Member Author*	<input type="checkbox"/> \$595.00	<input type="checkbox"/> \$695.00
Non-member Author*	<input type="checkbox"/> \$745.00	<input type="checkbox"/> \$845.00
AMIA Member	<input type="checkbox"/> \$645.00	<input type="checkbox"/> \$745.00
Non-member	<input type="checkbox"/> \$795.00	<input type="checkbox"/> \$895.00
AMIA Student Member	<input type="checkbox"/> \$325.00	<input type="checkbox"/> \$375.00
Student Non-member	<input type="checkbox"/> \$425.00	<input type="checkbox"/> \$475.00
Single-day Member (indicate day(s)) <input type="checkbox"/> _____	<input type="checkbox"/> \$325.00	<input type="checkbox"/> \$350.00
Single-day Non-member (indicate day(s)) <input type="checkbox"/> _____	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$400.00
Expo-only (per day)	<input type="checkbox"/> \$ 75.00	<input type="checkbox"/> \$ 75.00

Special Event Registration

- | | |
|--------------------------------|------------------------------------|
| Welcome reception guest ticket | <input type="checkbox"/> \$35.00 |
| CARING luncheon | <input type="checkbox"/> \$50.00 |
| Additional CD-ROM proceedings | <input type="checkbox"/> \$95 each |

Total Registration Fees (side 1) _____

Fax form to: 301-657-1296

or Mail to: AMIA

4915 St. Elmo Ave. Suite 401, Bethesda, MD 20814

Tutorial Registration

Registration for tutorials is additional to the general symposium registration. Select your the appropriate category and then select your tutorials from the list below. Please note many tutorials are being held at the same time - so make sure to watch the times on the tutorials you choose to attend.

Full Day Tutorials

Title	Schedule	Track	Member	\$325 Advance	\$350 On-site	Non-member	\$350 Advance	\$395 On-site	Student	\$295 Advance	\$315 On-site
<input type="checkbox"/> T1 Introduction to Biomedical and Health Informatics	Saturday Full Day	Primer		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T2 Terminologies and Classifications	Saturday Full Day	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T18 NHII Overview: From A to Z	Sat PM/SunAM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> NI AMIA 2005 Nursing Informatics Symposium	Saturday Full Day	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Half Day Tutorials

Title	Schedule	Track	Member	\$175 SPECIAL RATE	\$195 Advance	\$225 On-site	Non-member	\$195 SPECIAL RATE	\$215 Advance	\$250 On-site	Student	\$1160 SPECIAL RATE	\$180 Advance	\$195 On-site
<input type="checkbox"/> T3 Building Bayesian Decision Support Systems	Saturday AM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T4 A Primer on HL7	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T5 Using the Resources of The NCBI	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T6 Natural Language Processing (NLP) in Biomedicine	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T7 PACS - Digital Medical Image Management	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T8 IS in Health Care: Processes and Technology	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T9 The eXtensible Markup Language (XML)	Saturday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T10 Personal Health Records and E-health Portals	Saturday AM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T11 Assessing the Value of EHRs	Saturday PM	EHR		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T12 Applying UML to Clinical Informatics	Saturday PM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T13 Integration of Genomic, Biomedical & Clinical Databases	Saturday PM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T14 Modeling, Designing, and Implementing ODBC Databases	Saturday PM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T15 Human-computer Interaction for Biomedical Informatics	Saturday PM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T16 Unified Medical Language System (UMLS) Overview	Saturday PM	Primer	<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>			
<input type="checkbox"/> T17 Transforming & Visualizing Clinical Data for Research	Saturday PM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T19 Clinical Decision Support	Sunday AM	EHR		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T20 EHR: Selection and Implementation	Sunday AM	EHR		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T21 The EHR and Patient Safety	Sunday AM	EHR		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T22 Design & Conduct of Evaluation Studies in Biomedical Informatics	Sunday AM	Methods		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T23 Discovering Knowledge: Data Mining	Sunday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T24 Project Management	Sunday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T25 Ontologies in Biomedicine	Sunday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T26 Public Health for Informaticians	Sunday AM	Primer		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T27 Creating and Employing Enterprise Data Repositories	Sunday AM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T28 Evidence-Based Nursing Knowledge	Sunday AM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> T29 Simulation and Virtual Reality	Sunday AM	Selected Topics		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AMIA Membership

Complete information about AMIA membership is available on the AMIA Web site at www.amia.org

6- and 18- month special rates afford registrants the opportunity to receive full member benefits of AMIA including member rates for the AMIA 2005 Symposium. These special rates are only available through September 30, 2005.

	Regular	Institution	Student
Renew your membership for 2005	<input type="checkbox"/> \$250.00	<input type="checkbox"/> \$450.00	<input type="checkbox"/> \$35.00
Renew your membership for 2006	<input type="checkbox"/> \$250.00	<input type="checkbox"/> \$450.00	<input type="checkbox"/> \$35.00
6-month special (Jul-Dec 2005)	<input type="checkbox"/> \$125.00		
18-month special (Jul 05 - Dec 06)	<input type="checkbox"/> \$375.00		

Payment Information

Cancellation Policy

Cancellation of a conference registration does not constitute cancellation of a hotel room. Please be sure to handle both separately. Cancellation and refund requests must be received by AMIA in writing. By August 26, 2005 - Full refund minus \$50 processing fee. Between August 27, 2005 and October 5, 2005 50% refund. After October 5, 2005 no refund will be issued. However, registrations can be transferred to another member of your organization.

Transfer of Paid Registrations Policy

Registrants who are unable to attend the meeting may transfer their registration to another person. Transfer of registration must be in writing and received by the AMIA office by October 5 or presented on-site. If a member registration is transferred to a non-member, that person will have to pay the difference between the member and the non-member rates.

Payment must be in US dollars and payable through a US bank.
Please make all checks/money orders payable to AMIA. Please note:
All wire transfers require an additional \$20 processing fee.

Subtotal from Side 1	\$ _____
Tutorial fees	\$ _____
AMIA Membership	\$ _____
TOTAL PAYMENT	\$ _____

☐ Enclosed is a check for the total amount listed above.

☐ Please charge my credit card for the total listed above.

☐ Visa ☐ MasterCard ☐ American Express

Credit Card Number: _____

Expiration Date: _____ 3-digit security code: _____

Signature: _____

Advanced
July 16 -
October 17

On-site
after
October 17



● ● ● Leaders shaping the future of health information technology

The American Medical Informatics Association (AMIA) is an organization of leaders shaping the future of health information technology in the United States and abroad. AMIA is dedicated to the development and application of medical informatics in support of patient care, teaching, research, and health care administration.

AMIA links developers and users of health information technology, creating an environment which fosters advances that revolutionize health care. Membership is open to individuals, institutions, and corporations.

AMIA has many membership benefits

- Meet face-to-face and network with your colleagues
- Attend the AMIA Annual Symposium at member rates
- Learn about the latest developments in medical informatics from JAMIA - The Journal of the American Medical Informatics Association
- Get immediate and timely news about developments in the field of medical informatics with AMIA Monthly e-Newsletter and weekly Medical Informatics News Bytes
- Participate in ongoing dialogue and develop professional and personal networks at meetings and in on-line discussions through AMIA's Working Group program
- Be part of the changing public policy debate on information technology in health care - attend the AMIA Annual Day on the Hill or other public policy events
- Discover job openings and find valuable employees and employers through AMIA's on-line Job Exchange
- Increase your visibility by being listed in the AMIA Directory
- Receive discounts on a wide variety of publications and services related to the field

Access the most updated information on AMIA members through the on-line membership directory. The directory has search functions for ease in finding and contacting your colleagues.

Job Exchange

AMIA members may post unlimited jobs and resumes to the AMIA Job Exchange - the busiest area of the AMIA Web site.

AMIA Membership

AMIA offers membership in the following categories:

Regular
Institutional
Corporate
Student
Retired
Associate

Join or Renew Your AMIA Membership

To become an AMIA member or to renew your AMIA membership use the registration form contained in this brochure or visit the AMIA Web site.

Join AMIA today

through the registration

form and receive

member rates

for AMIA 2005

www.amia.org